

Brooklyn Army Supply Base: Pier 1
(Brooklyn Military Ocean Terminal or
Brooklyn Army Terminal: Pier 1)
Opposite the end of 63rd Street on
Upper New York Bay
Brooklyn
Kings County
New York

HAER No. NY-202-A

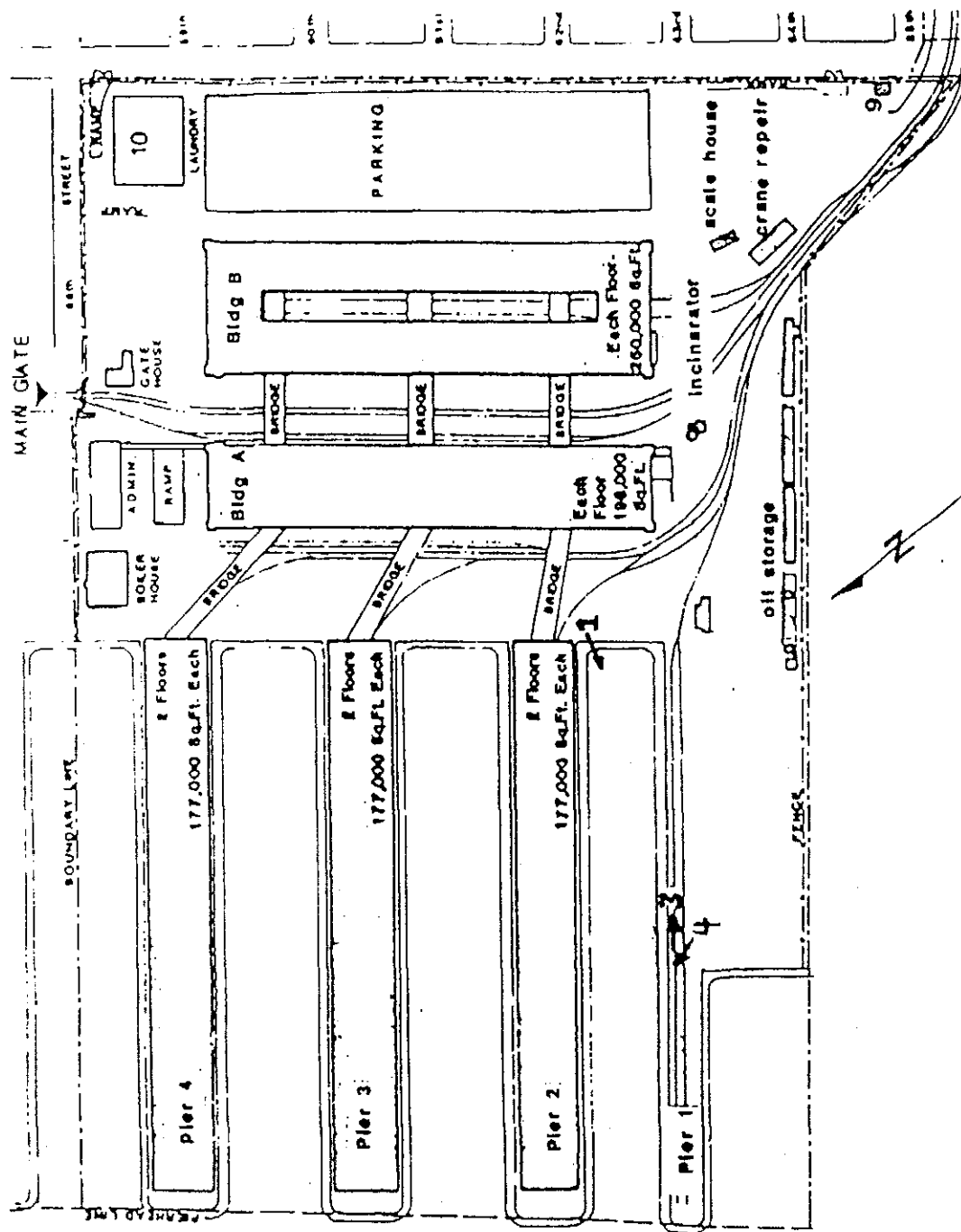
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
MID-ATLANTIC REGION, NATIONAL PARK SERVICE
DEPARTMENT OF THE INTERIOR
PHILADELPHIA, PENNSYLVANIA 19106

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 Key to Photographs



HISTORIC AMERICAN ENGINEERING RECORD

BROOKLYN ARMY SUPPLY BASE: PIER 1
(Brooklyn Military Ocean Terminal: Pier 1)
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HAER No. NY-202-A

Location: On Upper New York Bay, opposite the end of 63rd Street,
Brooklyn, Kings County, New York

USGS Quadrangle: Jersey City, New Jersey - New York
UTM Coordinates: 18.581880.4599680

Dates of Construction: 1918-19

Engineers: Post & McCord, Brooklyn, New York

Present owner: New York City Department of Ports and Trade
Battery Maritime Building
1 Whitehall Street
New York, NY 10004

Present use: Vacant

Significance:

Pier 1 was the only open pier at the Brooklyn Army Supply Base. It was designed for lighterage and handling of very heavy equipment, and provided the most direct connection to the base's principal rail link through the adjacent Long Island Railroad yards. The pier was largely intact in 1988.

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Project Information:

The Brooklyn Army Supply Base, also known as the Brooklyn Military Ocean Terminal (BMOT), is listed on the National Register of Historic Places. As part of the New York Harbor Collection and Removal of Drift Project implemented by the Army Corps of Engineers, the outer 619 feet of Pier 1 will be removed. This documentation meets conditions for mitigating adverse effects to the base, according to the terms of a Memorandum of Agreement among the Advisory Council on Historic Preservation, the New York State Historic Preservation Officer, and the New York District, Corps of Engineers. Project actions may occur as early as 1989.

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Part I: Historical Information*

Pier 1 was built 1918-19, and modified with gantry cranes during World War II. As discussed below, the cranes have been removed (Figures 1 and 2).

Part II: Descriptive Information

A. 1988 Conditions

The Pier 1 substructure suffers from the same problems seen at the other EMOT piers, and includes many repairs made above mean low water. Where the pier stretches northwest beyond the bulkhead to the south, ten feet of deck has been deliberately removed, presumably to inhibit unauthorized use of the outer pier end. The deck is otherwise intact, and retains its double set of railroad tracks on the north side and its gantry crane rails along either edge; the crane is gone. Some deck sections have relatively recent bituminous asphalt and gravel finishes over the original concrete deck, although original asphalt block paving also survives in places (PIER 1 TO WEST; PIER 1 TO EAST; PIER 1 DECK, TO SOUTHEAST; PIER 1, CROSS SECTION AT TRUNCATED DECK.).

B. Original Construction

Pier 1 is an open, 60-foot-wide concrete deck, supported by wood piles. The north side of the pier extends 1346 feet from the main EMOT bulkhead; the south side extends only 619 feet from the bulkhead south of the pier (Figures 4 and 6). Original wood foundations include piles arrayed in transverse rows or bents 10 feet apart, with the piles within each row driven at 4-foot centers. Bents also include diagonal 6x12 timber braces. Timber 12x12 pile caps top each bent. On the north side of the pier, there are longitudinal 12x12 stringers or rangers below the caps, providing additional support under deck sections with railroad tracks. The 18-inch-thick concrete deck, with 5/8-inch reinforcing rods and 500 p.s.f. capacity, was poured directly on the pile caps, in 10-foot-long sections acting essentially as beams. Pier sections fronting water had timber fender systems, which in 1988 consisted of 12x12 pilings set in 36-inch wide arrays. The outer end of the pier has a denser, solid cluster of fender piles. Along the southeast 727 feet, abutting fill which supported rail yard and marine repair facilities, the side of Pier 1 has vertical 6x10 timbers bolted to fender piles (Figure 3; Army Corps of Engineers 1926; PIER 1 TO EAST).

* Capitalized references are to photographs in this documentation.

The original deck surface consisted of asphalt block paving. Two sets of standard gauge, eighty-pound railroad tracks run along the northern side of the pier, between 12.8 and 30.7 feet from the deck edge (Figure 7). There was no other known permanent equipment built for the original pier, which shared portable handling equipment with Pier 2 until perhaps World War II. The portable equipment included electric 5-ton elevators, battery-operated tractors, platform trailers, 8-ton hoists, electric 5-ton trucks, and electric winches. It is possible that the crane rail described below dates to 1919, however, since gantry cranes were part of original base design (Crocker 1919: 76-7). Original construction also probably included three small warehouses on the bulkhead immediately south of, and parallel to, the pier. The warehouses may have served for temporary storage of items designated for immediate shipment, but available information on this point is very limited, as is any data on a small laundry building built on or near the pier (Army Corps of Engineers 1926, 1932; New York State Office of Parks, Recreation and Historic Preservation 1983; PIER 1 DECK, TO SOUTHEAST).

C. Modifications

During additions made to the Army Base in World War II, the Army added heavy lift cranes to Pier 1 facilities. The Port Series for 1942 lists three steam-powered cranes and one gas-powered crane, although we have no other documentary or graphic data on the location of these units (Army Corps of Engineers 1942). The installation of 2-inch-wide crane rails along either side of the pier, 6 or 7 feet from the deck edges, probably dates to this period, and indicates that some or all of the cranes were movable gantry units (Figure 3). By the time the Army closed the base in 1975, the only crane on Pier 1 was a stationary revolving gantry unit, located about midway along the outshore 619 feet of the pier. The crane was removed by 1978 (Army Corps of Engineers 1978, and n.d. [plans and drawings]; Thomas Flagg Collection [historic views]; PIER 1 DECK, TO SOUTHEAST).

World War II changes to Pier 1 and vicinity also included removal of the laundry building, and replacement of the three bulkhead warehouses with a 69-by-604-foot steel-framed, metal sided marine repair shop. There were also very small storage buildings associated with the latter structure. Marine repair shop functions remain undocumented, but may have included maintenance of small military vessels, and private lighters or tugboats needed to meet demanding wartime shipping requirements. The repair shop was apparently removed by c1978 (Army Corps of Engineers 1942, 1953, 1965, 1978, and n.d. [plans and drawings]; Thomas Flagg Collection [historic views]).

Part III: Sources of Information

Plans and Drawings

Army Corps of Engineers

n.d. Plot Plan/Brooklyn Army Terminal. On file, New York City Department of Ports and Trade, Battery Maritime Building, 1 Whitehall Street, New York, NY 10004.

Historic Views

Published and unpublished aerial views of the Brooklyn Army Base are probably fairly widespread. Pier 1 appears in some views, including one taken shortly after the base was completed, published in Army Corps of Engineers 1926 and 1932. Two unpublished 1972 aerial views in the Thomas Flagg Collection show the revolving gantry crane and the marine repair shop at Pier 1; rights to these views were not obtained for this documentation.

Bibliography

Unpublished Sources

Dravo Van Houten, Inc.

1984 General Design Memorandum, Phase II-Project Design, City of New York, Brooklyn Reach 2. New York Harbor Collection and Removal of Drift Project. Draft, on file New York District, Army Corps of Engineers.

New York State Office of Parks, Recreation and Historic Preservation

1983 National Register of Historic Places Inventory -- Nomination Form. United States Army Military Ocean Terminal.

Published Sources

Army Corps of Engineers

1926 The Port of New York, N.Y. and N.J. Port Series No.5.
Washington: Government Printing Office
1932 As above, revised
1942 " "
1953 " "
1965 " "
1978 " "

Likely Sources Not Yet Investigated

Original Department of the Army archives are the principal source not explored for this documentation, and might provide original drawings, and more information on original design or planning considerations, or on later terminal use. It is also possible that photographs showing different handling equipment at Pier 1 exist in these archives, or perhaps in contemporary newspapers.

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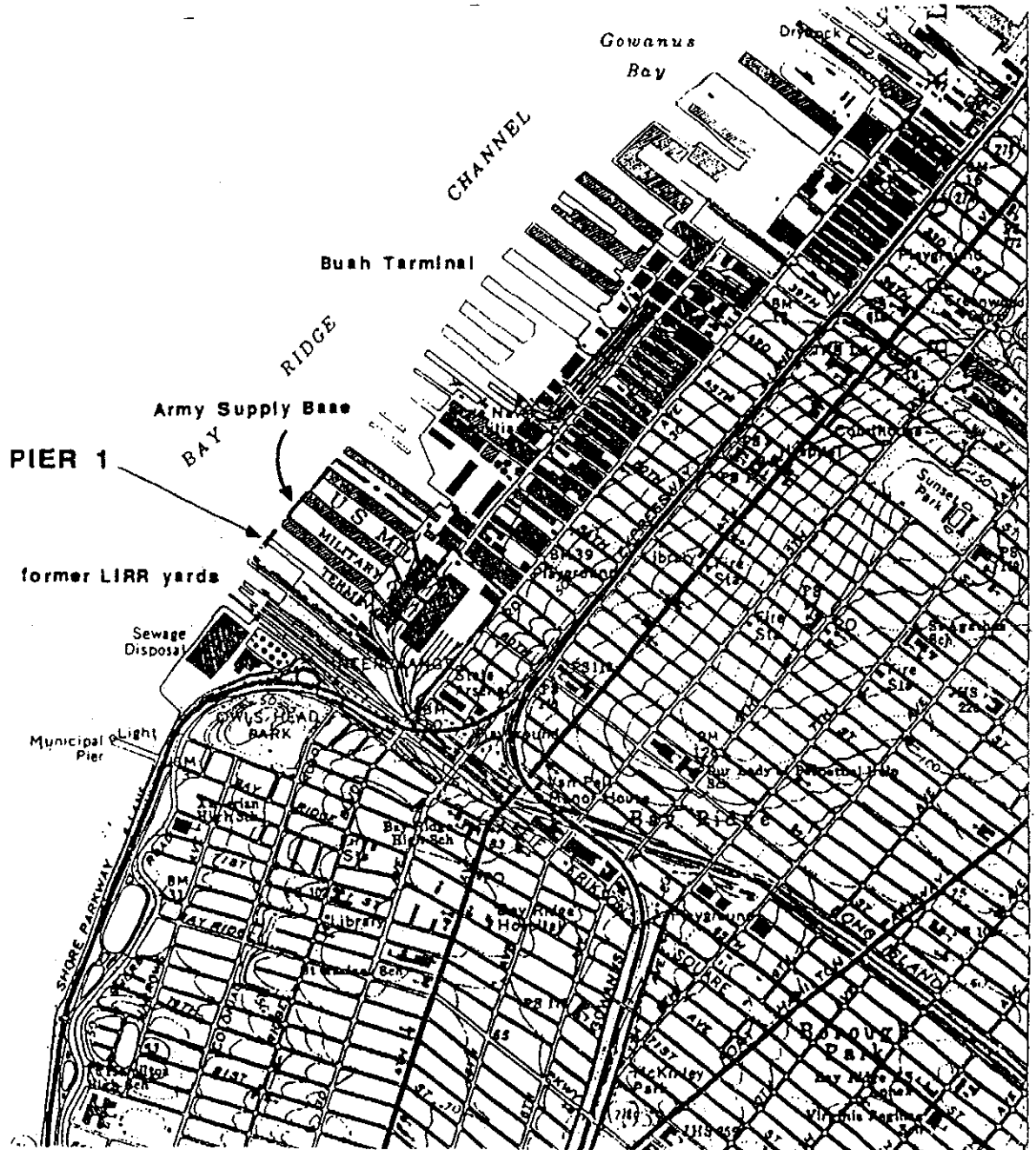


Figure 1. PIER 1 LOCATION ON THE BROOKLYN WATERFRONT
 base map: Jersey City U.S.G.S. quadrangle sheet

BROOKLYN ARMY SUPPLY BASE: PIER 1
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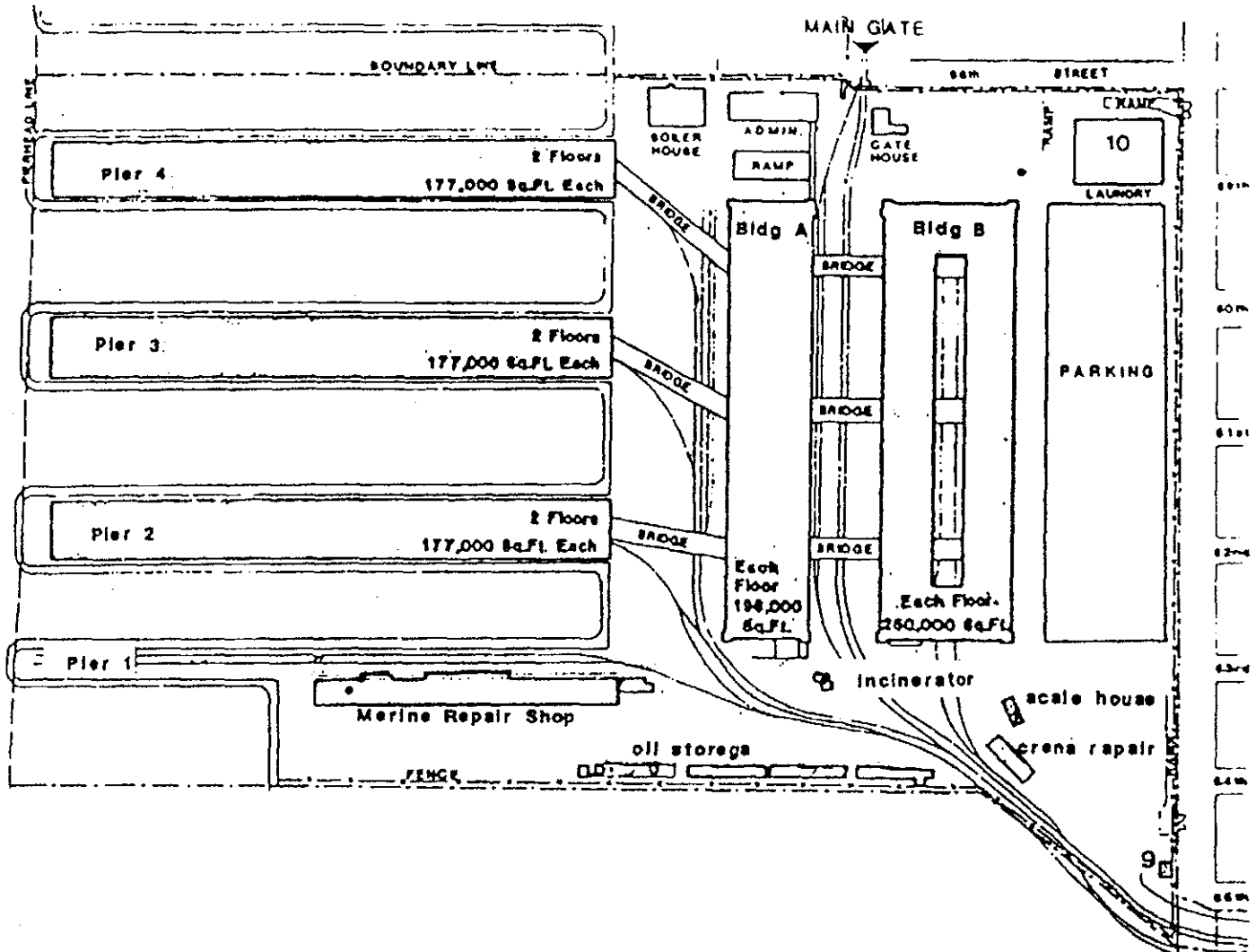


Figure 2. BROOKLYN ARMY SUPPLY BASE c1975, WITH PRINCIPAL POST-1920 ADDITIONS

BROOKLYN ARMY SUPPLY BASE: PIER 1
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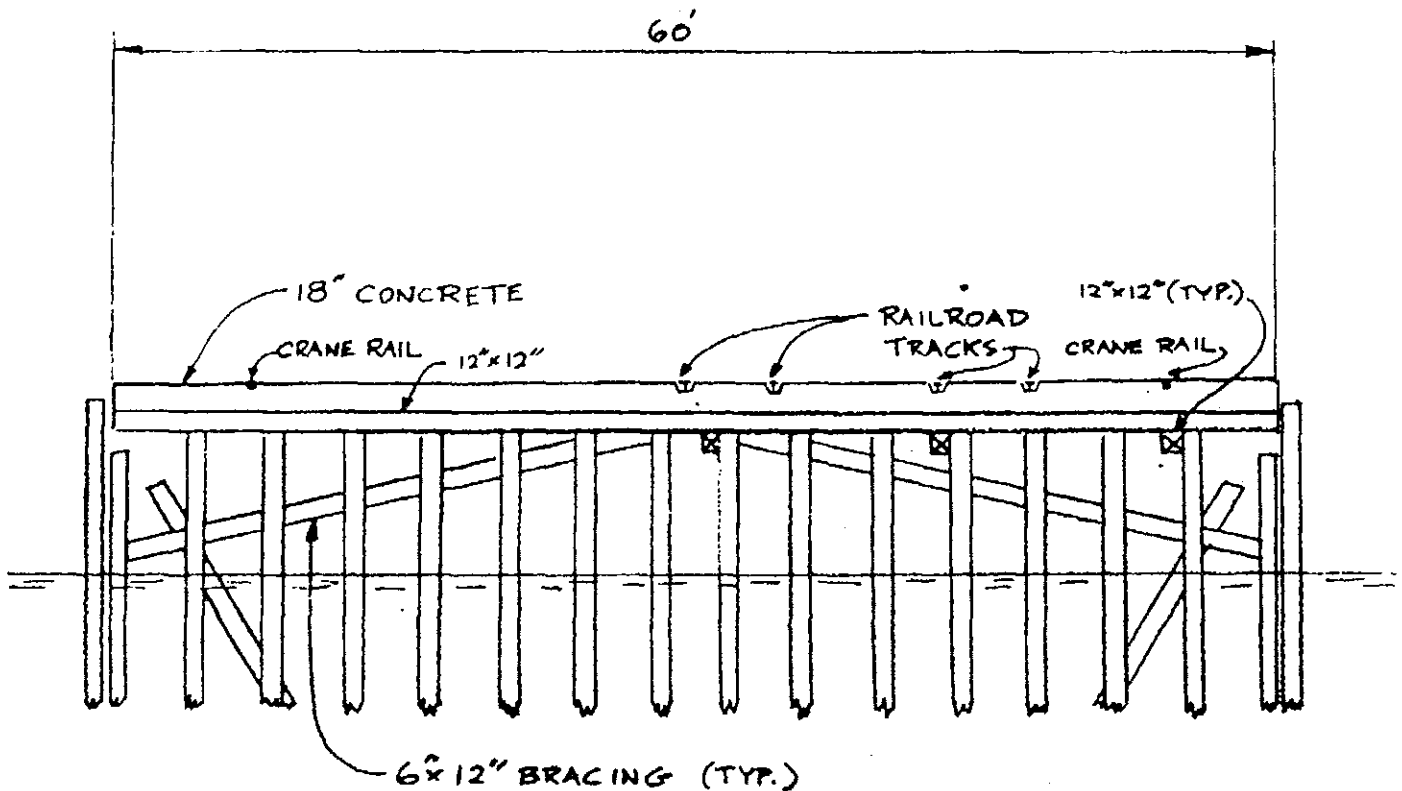


Figure 3. TYPICAL CROSS-SECTION OF BROOKLYN ARMY BASE PIER 1, TO NORTHWEST
base drawing: Dravo van Houten, Inc., 1984